

Introduced by Senators Ortiz and Perata

February 18, 2005

An act to add Chapter 8 (commencing with Section 105440) to Part 5 of Division 103 of the Health and Safety Code, relating to public health, and making an appropriation therefor.

LEGISLATIVE COUNSEL'S DIGEST

SB 600, as introduced, Ortiz. Biomonitoring.

Existing law establishes various programs for the protection of the public from exposure to toxins, including, but not limited to, the Childhood Lead Poisoning Prevention Act, administered by the State Department of Health Services, which imposes a fee upon manufacturers or persons who are responsible for lead contamination and applies the proceeds of the fee to reduction or elimination of the harm caused by the lead contamination.

This bill would require the Division of Environmental and Occupational Disease Control within the department to establish the Healthy Californians Biomonitoring Program to monitor the presence and concentration of designated chemicals, as defined, in Californians.

This bill would require the department and the agency to establish an advisory panel to assist the department and the agency. The bill would establish the Healthy Californians Biomonitoring Fund for deposit of funds, upon appropriation by the Legislature, and would continuously appropriate the fund for the biomonitoring program. The bill would require the department to provide public access to information, and to report to the Legislature and the public.

Vote: majority. Appropriation: yes. Fiscal committee: yes.
State-mandated local program: no.

The people of the State of California do enact as follows:

1 SECTION 1. The Legislature finds and declares all of the
2 following:

3 (a) Chronic disease has reached epidemic proportions in the
4 United States. An estimated 125 million Americans, or 43
5 percent of the population, have at least one chronic illness, while
6 60 million people, or 21 percent of the population, suffer from
7 multiple chronic conditions. Roughly 20 million American
8 children suffer from at least one chronic health problem. Cancer,
9 asthma, birth defects, developmental disabilities, endometriosis,
10 and infertility, are becoming increasingly common, and mounting
11 evidence links incidence and severity of these diseases to
12 exposure to environmental toxicants.

13 (b) Chronic diseases carry enormous costs to California. For
14 example, the estimated total cost of asthma in California is
15 approximately \$1.27 billion annually. For individuals born in
16 1988 with one or more of the 18 most common birth defects,
17 estimated lifetime costs for medical treatment and lost
18 productivity exceed \$1 trillion. Special education for the
19 estimated 1 million California children with learning disabilities,
20 carries an annual price tag of \$12 billion.

21 (c) An estimated 85,000 chemicals are registered for use today
22 in the United States. Another 2,000 chemicals are added each
23 year. Some toxicological screening data exists for only 7 percent
24 of these chemicals. More than 90 percent of these chemicals have
25 never been tested for their effects on human health. Large
26 numbers of these chemicals are found in cosmetics, personal care
27 products, pesticides, food dyes, cleaning products, fuels, and
28 plastics. Because of their ubiquity in modern life, Californians
29 are commonly exposed to multiple chemicals every day. Many of
30 these chemicals persist in the environment, and accumulate and
31 remain in body fat, and have been shown to be toxic.

32 (d) Biomonitoring studies have scientifically demonstrated
33 that human exposure to a multitude of persistent chemicals is
34 both chronic and widespread. The Centers for Disease Control
35 and Prevention has documented the presence of 116
36 environmental chemicals in the blood and urine of Americans of
37 all ages and races. More than 200 synthetic chemicals have been
38 detected in breast milk, many of which are known to cause

1 mammary tumors in animals. Unlike the United States, Germany
2 and Sweden have national breast milk monitoring programs,
3 which have led to policies that have dramatically reduced
4 exposure to environmental toxicants.

5 (e) The presence of toxins in breast milk raises a special health
6 concern for breastfeeding mothers, pregnant women, and their
7 babies. The developing fetus is at great risk from in utero
8 exposure to harmful chemicals, and nursing infants are
9 vulnerable because certain persistent toxic chemicals concentrate
10 in breast milk.

11 (f) While acknowledging the risk for concentration of toxic
12 chemicals in breast milk, there is a broad consensus among
13 medical providers and maternal and child health advocates that
14 breast milk is the most nutritious food for infants. Mother's milk
15 helps a nursing infant develop a stronger immune system and
16 protects the child from illnesses and allergies, provides vital
17 nutrients during critical periods of growth, and offers other
18 potential protections against environmental pollutants and
19 pathogens.

20 (g) Biomonitoring data supports public health by establishing
21 trends in chemical exposures, validating modeling and survey
22 methods, supporting epidemiological studies, identifying
23 impacted communities or particularly vulnerable communities,
24 assessing the effectiveness of current regulations, helping to set
25 priorities for reform, and protecting Californians from
26 unanticipated emergency exposures.

27 (h) The priority public policy recommendation from the 2002
28 International Summit on Breast Cancer and the Environment was
29 to establish a national biomonitoring program in the United
30 States using breast milk and other biospecimens to assess
31 community health.

32 (i) In September 2001, the Legislature passed Senate Bill 702
33 (Chapter 538, Statutes of 2001), making California the first state
34 in the nation to begin planning a statewide environmental health
35 tracking network for chronic diseases and environmental hazards
36 and exposures. In followup, the Senate Bill 702 Expert Working
37 Group has recommended the establishment of a statewide
38 biomonitoring program.

39 (j) The Legislature, therefore, finds and declares that the
40 establishment of a statewide biomonitoring program is necessary

1 to identify the presence of toxic chemicals in individuals and
2 communities, to educate and counsel affected individuals and
3 communities, and to develop strategies to prevent or minimize
4 the harmful effects of the chemicals. A biomonitoring program
5 will expand biomedical, epidemiological, and behavioral public
6 health research. California, an established leader in health
7 promotion, health policy, and health care delivery and response,
8 should encourage and fund this research, which will contribute to
9 the health and well-being of millions of people.

10 SEC. 2. Chapter 8 (commencing with Section 105440) is
11 added to Part 5 of Division 103 of the Health and Safety Code, to
12 read:

13
14 CHAPTER

15 8. HEALTHY CALIFORNIANS BIOMONITORING PROGRAM

16
17 Article 1. General

18
19 105440. (a) This chapter shall be known, and may be cited,
20 as the Healthy Californians Biomonitoring Program.

21 (b) For the purposes of this chapter, the following terms have
22 the following meanings:

23 (1) "Department" means the State Department of Health
24 Services.

25 (2) "Agency" means the California Environmental Protection
26 Agency.

27 (3) "Director" means the Director of Health Services.

28 (4) "Secretary" means the Secretary for Environmental
29 Protection.

30 (5) "Division" means the Division of Environmental and
31 Occupational Disease Control within the department.

32 (6) "Office" means the Office of Environmental Health
33 Hazard Assessment within the agency.

34 (7) "Biomonitoring" means the process by which the presence
35 and concentration of toxic chemicals and their metabolites are
36 identified within a biospecimen as a means to assess the chemical
37 body burden.

38 (8) "Biospecimen" means a sample of human blood, hair,
39 urine, breast milk, body fat and other body tissue, or any other

1 biophysical substance that is reasonably available as a medium to
2 measure the presence and concentration of toxic chemicals.

3 (9) “Panel” means the Healthy Californians Biomonitoring
4 Program Advisory Panel established pursuant to Article 2
5 (commencing with Section 105448).

6 (10) “Community” means geographically or
7 nongeographically based populations that may participate in the
8 biomonitoring program. A “nongeographical community”
9 includes, but is not limited to, populations that may share a
10 common chemical exposure through similar occupations,
11 populations experiencing a common health outcome that may be
12 linked to chemical exposures, or populations that may experience
13 similar chemical exposures because of comparable consumption,
14 lifestyle, or product preferences.

15 (11) “Designated chemicals” means those chemicals that have
16 been demonstrated, through data provided by scientific,
17 peer-reviewed animal, cell, or human studies, to be known to
18 negatively impact, or to be strongly suspected of negatively
19 impacting, human health by contributing to an increase in serious
20 illness or mortality.

21 105441. The division in collaboration with the agency shall
22 establish the Healthy Californians Biomonitoring Program. The
23 division is the lead agency for the program unless otherwise
24 specified in this chapter. The program shall utilize biospecimens,
25 as appropriate, to identify toxic chemicals that are present in the
26 bodies of Californians. Biomonitoring shall take place on a
27 strictly voluntary and confidential basis. Results reported
28 pursuant to this chapter shall not disclose individual confidential
29 information of participants. Appropriate biospecimens shall be
30 used to monitor and assess the presence and concentration of
31 designated chemicals.

32 105443. (a) All participants shall be evaluated for the
33 presence of toxic chemicals as a component of the biomonitoring
34 process. To the extent that resources permit or the department is
35 able to utilize existing resources, participants shall receive
36 consultation, health care referrals, and followup counseling, and
37 shall be offered educational activities and materials addressing
38 possible routes of exposure and ways to reduce exposure. Any
39 public or private entity, including local agencies, may provide
40 these activities by contract.

(b) In instances when a designated chemical is detected in the program participants, any office or department may collaborate to determine the presence of a designated chemical in the environment, and possible routes of exposure. Activities may include, but shall not be limited to, all of the following:

(1) The sharing of existing data and studies, including, but not limited to, archived biospecimens.

(2) Assessments of soil, water, air, food, homes, consumer products, or other aspects of a particular community.

(3) Community education programs to help avoid exposure or reduce harmful exposures.

105444. (a) The department shall adopt guidelines and model protocols that address the science and practice of biomonitoring to implement this chapter that accomplish all of the following:

(1) Ensure confidentiality and informed consent, and communicate findings to participants, communities, and the general public.

(2) Emphasize that any training program specifically for health care providers, health educators, and other program administrators emphasize the importance of cultural sensitivity.

(3) Serve as a guide for other biomonitoring programs supported by state funds.

(4) For biomonitoring using breast milk as a biospecimen, guidelines for individual consultation and community education shall ensure that parents understand the importance of breastfeeding so that the program does not have any unintended and unwarranted negative effects upon a parent's decision whether to breastfeed.

(c) The department may consider the analytical methods utilized by the federal Centers for Disease Control and Prevention for the studies known collectively as the National Report on Human Exposure to Environmental Chemicals.

(d) The department shall work in collaboration with the California Health Tracking Program.

(e) The division, office, and panel shall work and communicate with the Primary Care and Family Health Division of the department, and with other offices concerning interagency information sharing and synchronization of environmental tracking and policy information. However, personal information, as defined in Section 1798.3 of the Civil Code, shall not be

1 shared without the written and informed consent of the individual
2 to whom it pertains.

3 105445. The department, to the extent that funds are
4 available, may enter into contractual agreements with health
5 clinics, health facilities, community-based organizations, or
6 experts in a particular field, to perform any of the activities
7 enumerated in the guidelines adopted pursuant to Section
8 105444.

9 105446. To the extent that funds are available pursuant to this
10 chapter, moneys may be allocated from the fund for the purpose
11 of strengthening the state's laboratory capacity in order to meet
12 the responsibilities enumerated in this chapter.

13
14 Article 2. The Advisory Panel
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16 105448. (a) The department and agency shall establish the
17 Healthy Californians Biomonitoring Program Advisory Panel.
18 The panel shall be composed of 16 members. Eight members
19 shall have expertise in public health, environment, epidemiology,
20 and biology, and the other eight members shall have expertise on
21 the special vulnerability of children, women of childbearing age,
22 seniors, health affected groups, and other communities of
23 concern.

24 (b) The director, the secretary, the President pro Tempore of
25 the Senate, and the Speaker of the Assembly shall each appoint
26 four members of the panel.

27 (c) All members shall be appointed to the panel by July 1,
28 2007. Each member shall be appointed for a three-year term.
29 Members may be reappointed for additional terms without
30 limitation.

31 (d) The secretary shall appoint the chair of the Scientific
32 Committee, and the director shall appoint the chair of the
33 Community Representative Committee from the panel's
34 membership, who shall also serve as cochairs of the panel.

35 (e) The panel shall meet as often as it deems necessary, with
36 consideration of available resources, but at a minimum, twice a
37 year.

38 (f) Members of the panel and any subcommittees shall serve
39 without compensation, but shall be reimbursed for travel and

1 other necessary expenses incurred in the performance of their
2 duties under this chapter.

3 (g) The panel shall make recommendations to the division and
4 office regarding the design and implementation of the program.
5 The panel shall review program priorities, draft protocols, study
6 reports, outreach materials, and shall make recommendations to
7 the secretary and the director regarding all of the following:

8 (1) Chemicals that are priorities for biomonitoring in
9 California and communities where biomonitoring will take place.

10 (2) A review of the communication of findings prior to release
11 of the findings.

12 (h) The panel shall consider the criteris and recommendations
13 generated by the department's Biomonitoring Planning Project,
14 the California Environmental Health Tracking Network, the
15 California Environmental Health Tracking Program, and relevant
16 peer-reviewed studies, when making recommendations.

17 18 Article 4. Fiscal Provisions 19

20 105453. Any funds provided, upon appropriation by the
21 Legislature, to the department and the agency exclusively for the
22 purposes of this chapter shall be deposited into the Healthy
23 Californians Biomonitoring Fund, which is hereby established
24 within the State Treasury. Notwithstanding Section 13340 of the
25 Government Code, the fund including all interest earned on
26 moneys in the fund, is hereby continuously appropriated, without
27 regard to fiscal years, to the division for the purposes of this
28 chapter. Administrative costs associated with implementing the
29 program established pursuant to this chapter in any fiscal year
30 shall not exceed 15 percent of the total funds deposited into the
31 fund for that fiscal year.

32 33 Article 5. Reporting 34

35 105459. (a) By January 1, 2009, the department shall submit
36 a report to the Legislature summarizing the activities of the
37 program, including program descriptions, methodology, program
38 outcomes, and assessment of the activities of the various
39 biomonitoring functions conducted pursuant to this chapter.

1 (b) By January 1, 2010, the department shall submit a report
2 to the Legislature regarding additional activities and
3 recommendations for improving the program based activities and
4 findings to date. Annually thereafter, in consultation with the
5 panel, the department shall forward a report to the Legislature on
6 the program, policy, and relevant interagency activities.

7 (c) The department shall provide the public access to
8 information which they are required to release pursuant to the
9 California Public Records Act (Chapter 3.5 (commencing with
10 Section 6250) of Division 7 of Title 1 of the Government Code)
11 in a manner that is timely and understandable to the average
12 person.

13 (b) The division and office shall disseminate biomonitoring
14 findings to the general public via governmental and other Web
15 sites. All health and environmental exposure data shall be
16 provided to the general public in a summary format to protect the
17 confidentiality of program participants. Within 30 calendar days
18 after the division releases its interim and final report to the
19 Legislature, the reports shall be made available to the public.